

Trusted Network Computing

Scott McNealy

Chairman and CEO

Sun Microsystems, Inc.

ceo@sun.com

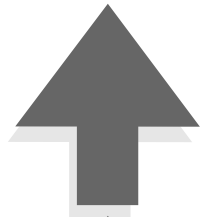


TRUSTED

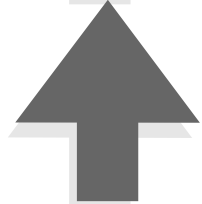
Network Computing



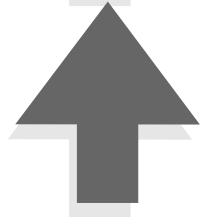
Sun Today - June 2004



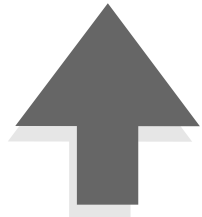
\$3.110 B revenue



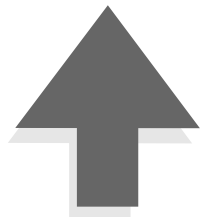
\$7.6 B cash



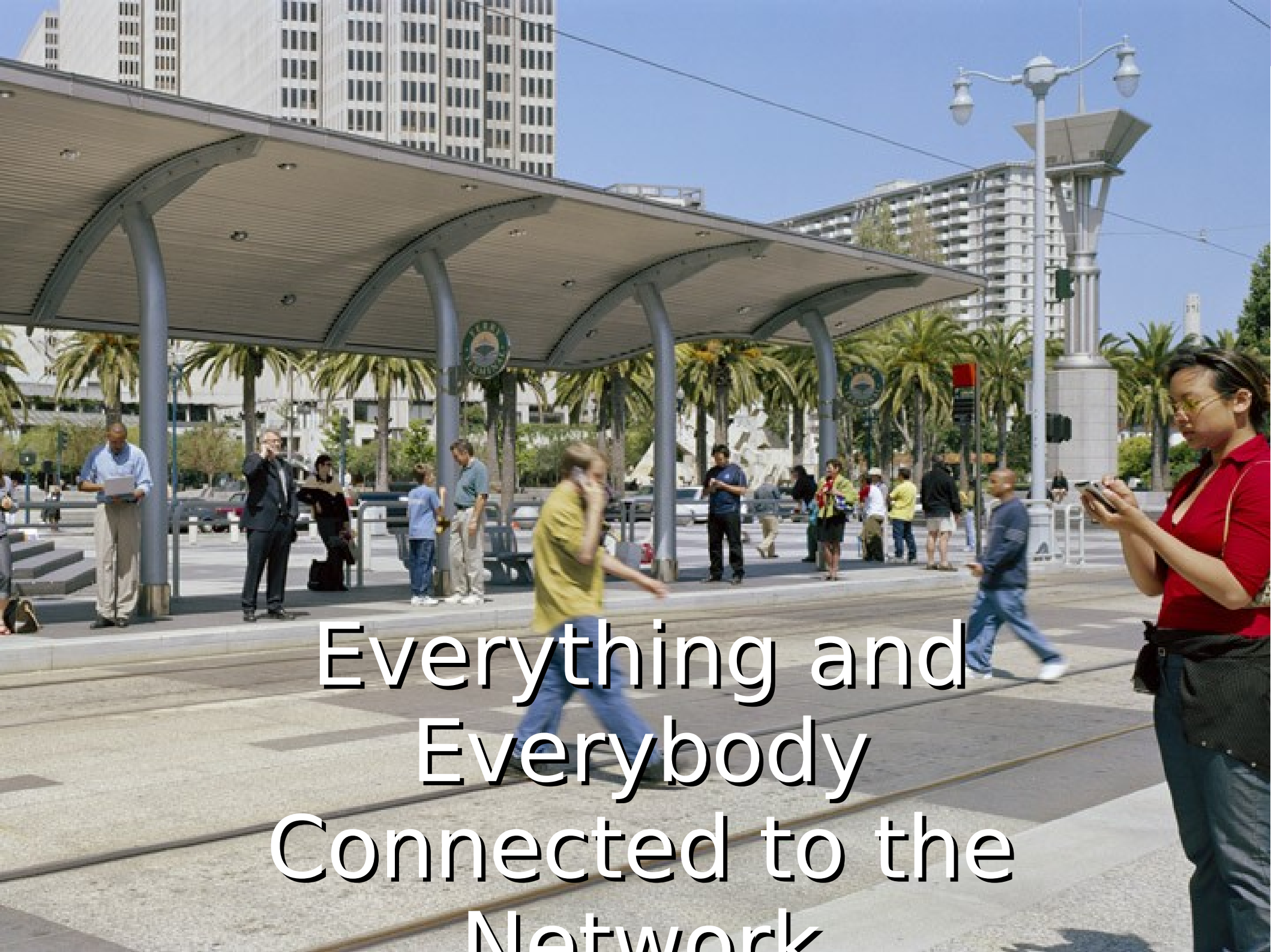
\$134 B installed base



4.5 M Java developers



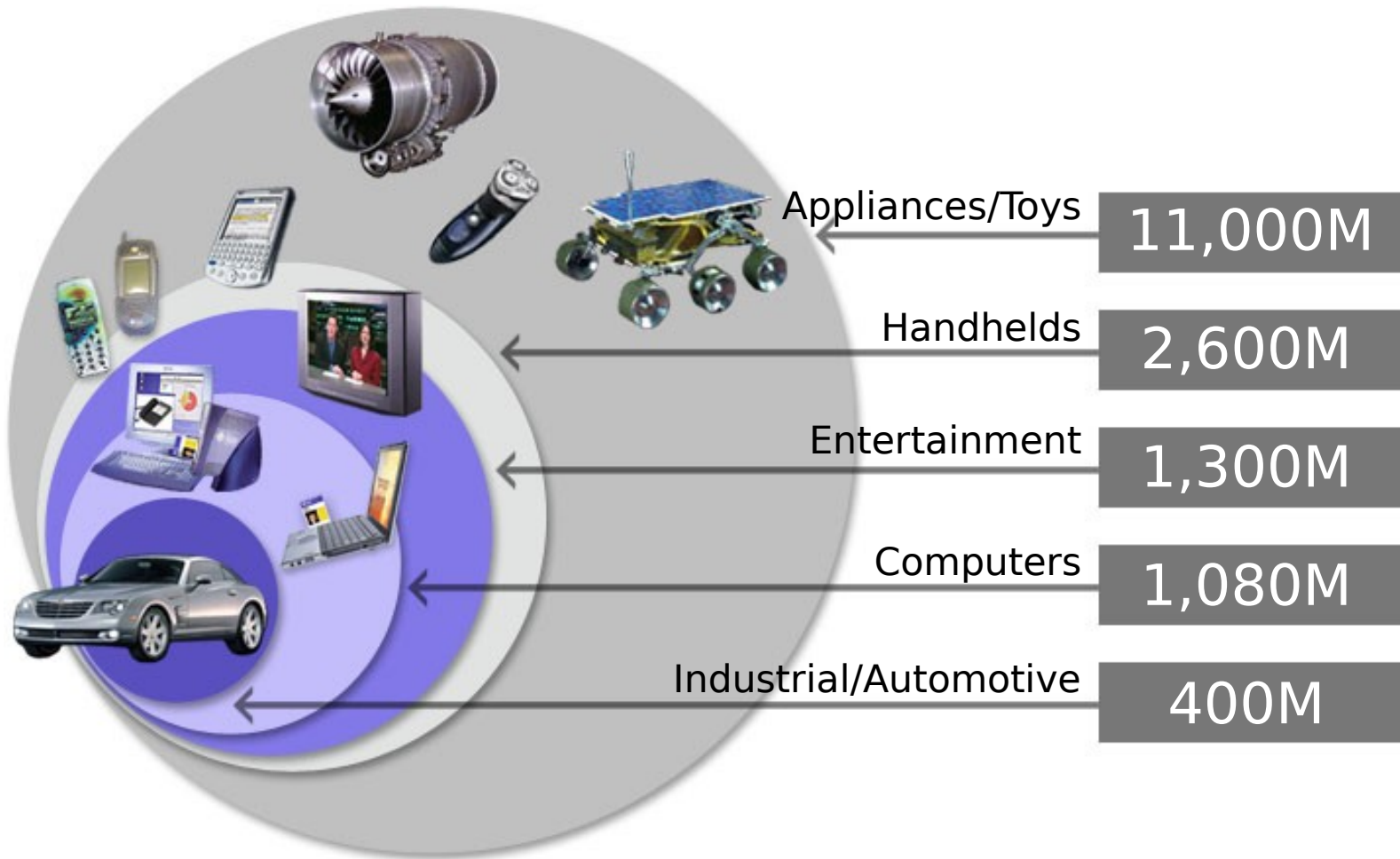
\$795 M profit



Everything and
Everybody
Connected to the
Network

Traditional Network Devices

WW Installed, 2012



RFID Tags and Sensors

WW Installed, 2012

Traditional
Network
Devices



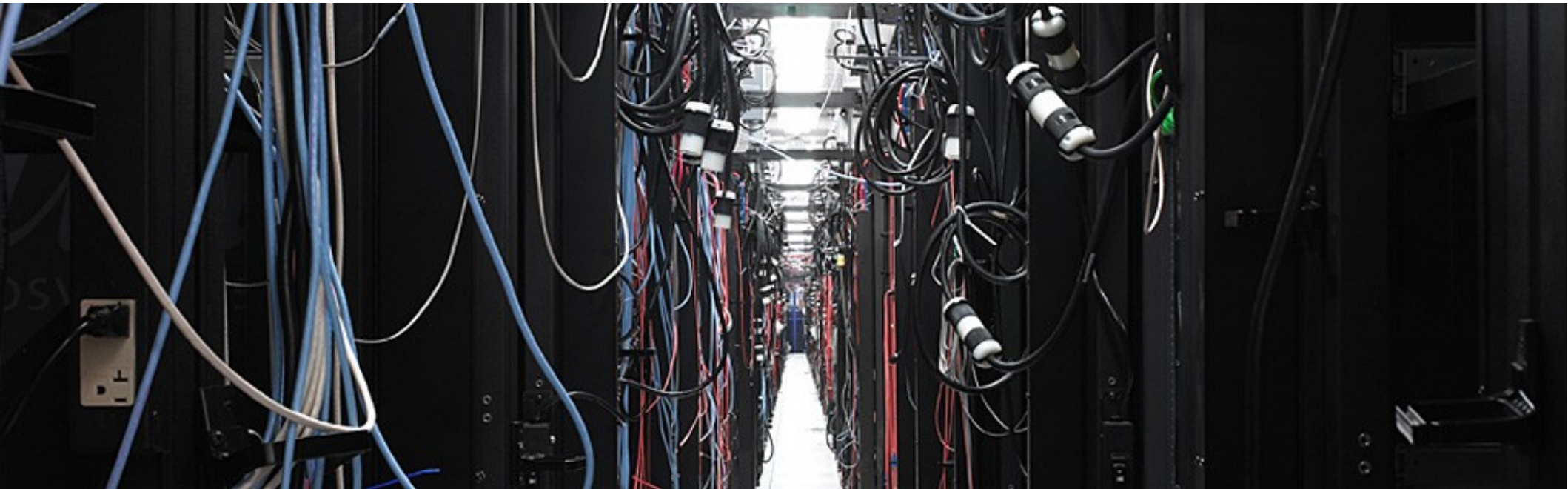
17 Billion

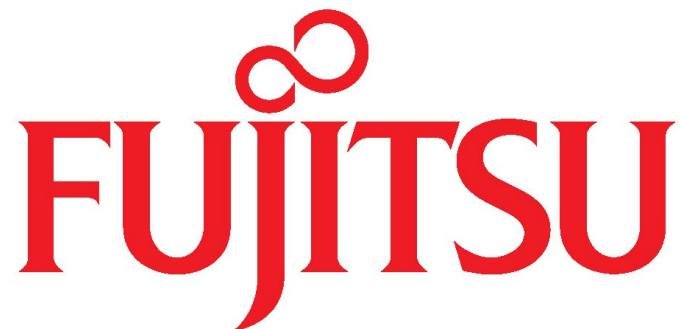
1 Trillion!



22 Year Mission

To solve complex network computing
problems for governments,
enterprises
and service providers



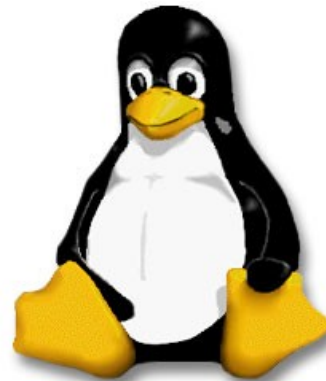




SOLARIS™



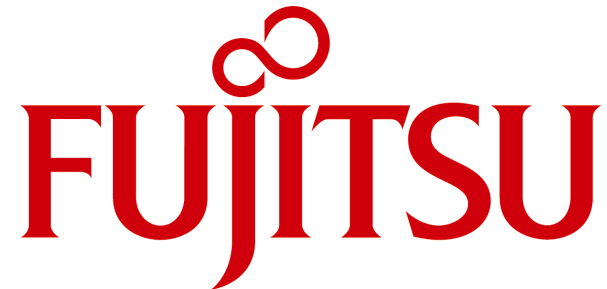
OpenOffice.org



mozilla



Growing a 20 Year Relationship



- Growing the Solaris market
- Will jointly develop and deliver a new generation of SPARC systems debuting in mid-2006
- An expanded distribution of both companies' existing product lines

- \$1.9B settlement
- 10 year broad technology collaboration arrangement and framework for competition
- Interoperability – server-to-server, server-to-client
- Sun Fire™ x86 servers certified for Windows platform
- Uniquely advantages Sun and Microsoft in the market

A 10 YEAR FRAMEWORK FOR COLLABORATION AND COOPERATION



Microsoft®

No. 1 Market share platform for Oracle Database

No. 1 Market share platform for Oracle Applications

No. 1 Market share leader globally with Oracle

No. 1 Core platform: Solaris/SPARC/x86

No. 1 Java/J2EE partner

20 YEAR RELATIONSHIP IN SALES AND SERVICE

ORACLE®





Defense Advanced Research Projects Agency



Raytheon



NORTHROP GRUMMAN



GENERAL DYNAMICS
Advanced Information Systems

TRUSTED
COMPUTER SOLUTIONS



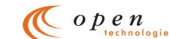
20,000 iForce Partners Worldwide



Data Systems Worldwide, Inc.



CONTINENTAL RESOURCES, INC.



Congratulations!!

Air Force Standard Systems Group (SSG)
1st organization to seek certification
from Sun as a Java Center of Excellence

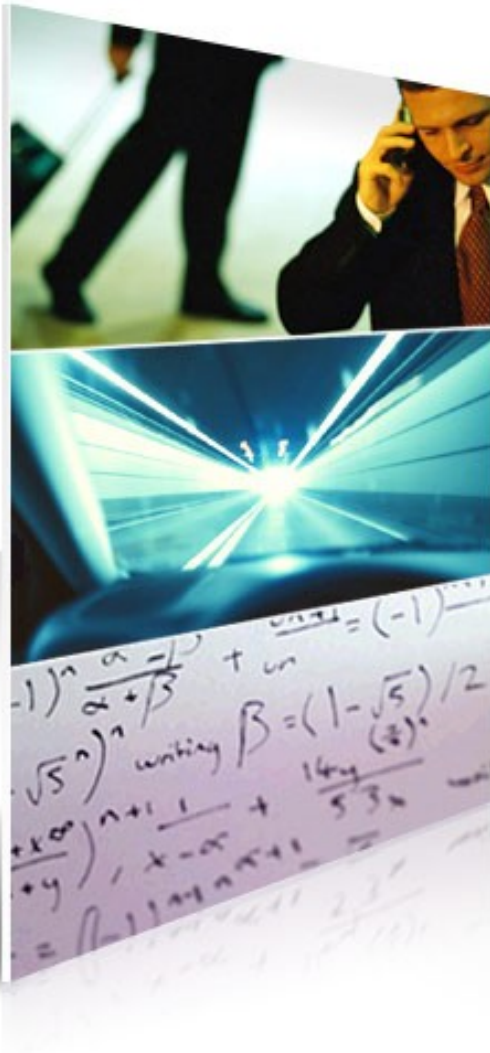
Java Center of Excellence -
people/process/technology

- Security
- Security
- Security
- Security
- Complexity
- Reliability
- Manageability
- Scalability

HOT TOPICS FOR THE GOVERNMENT SECTOR

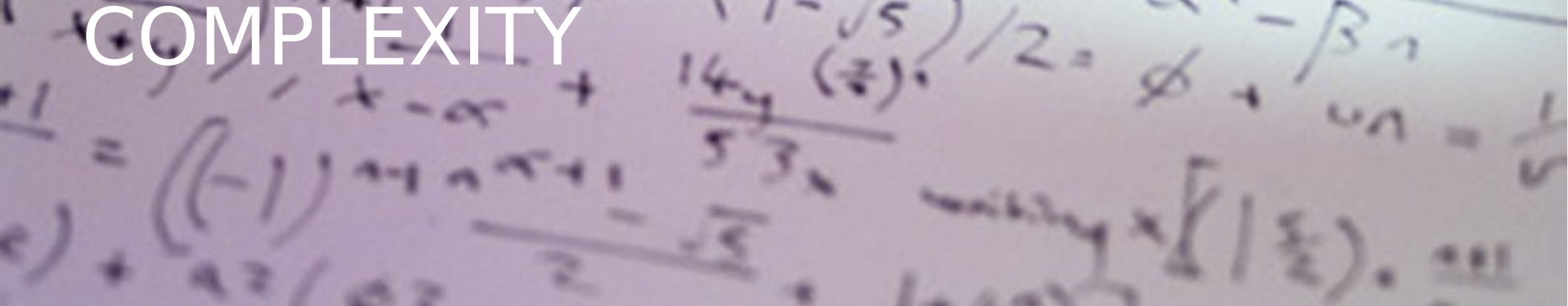


Three Strategies for Growth



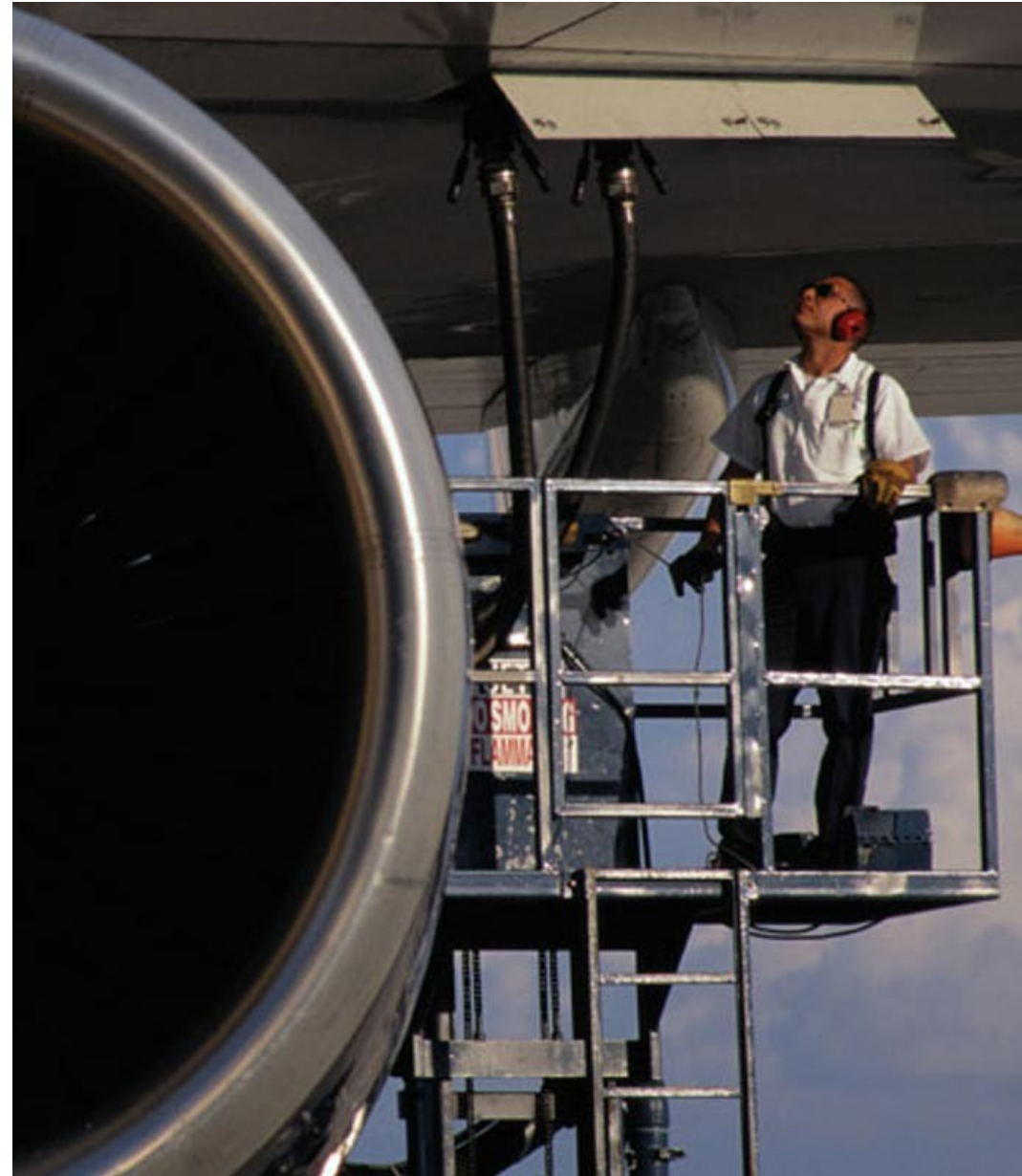
- Attack cost and complexity
- Accelerate network service deployment
- Unleash Mobility with security

ATTACK COST AND



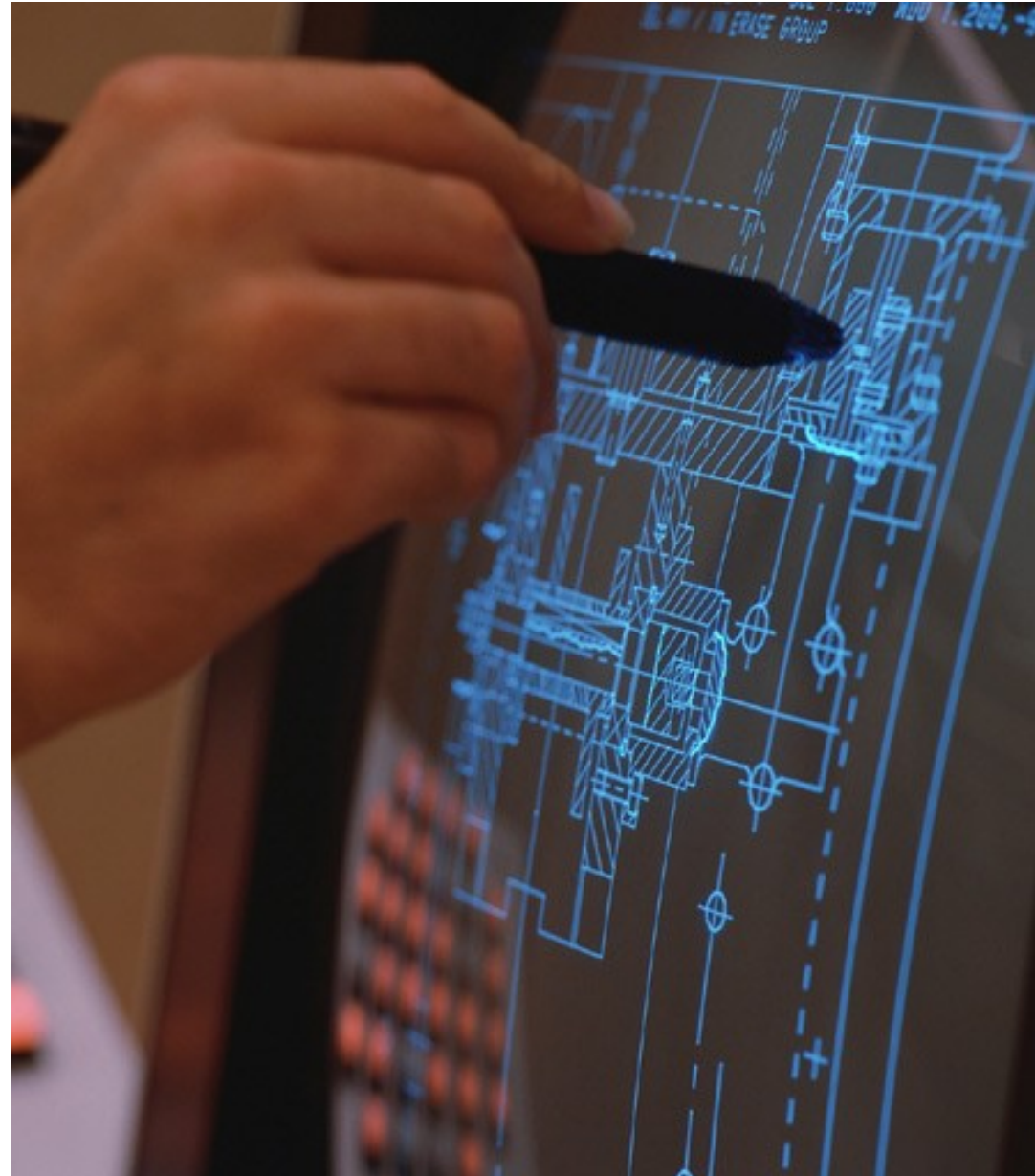
Air Force Challenges Today

**How to fix a
jet aircraft
engine**



Delivery

**Design your
custom
delivery
truck**



Delivery

**Design your
custom truck
with best of
breed parts**



Delivery

**Purchase a
truck**



Delivery

**Rent a moving
van**



Delivery

**Hire
FedEx**



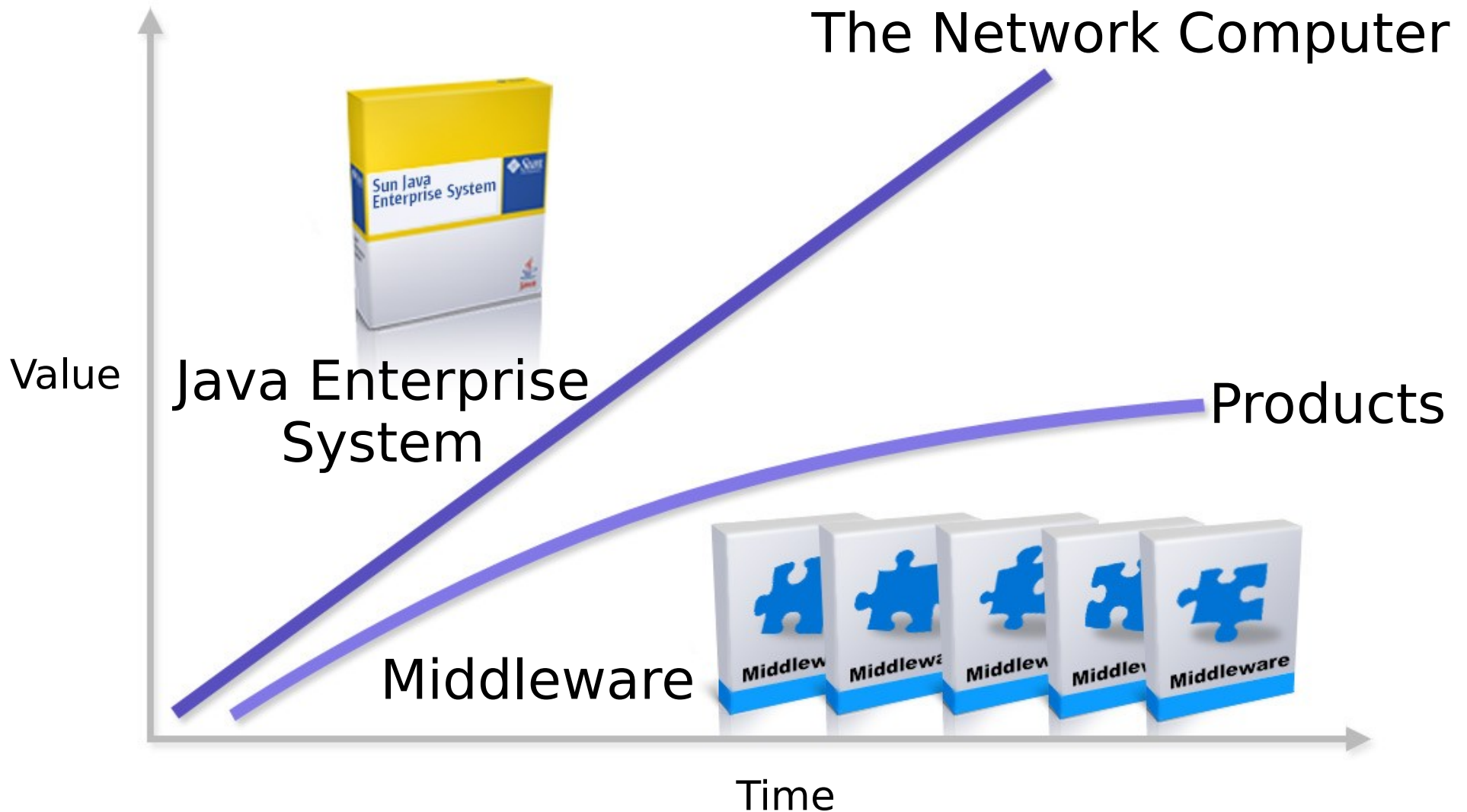
- Secure portal
- Identity management
- Mainframe rehosting
- Digital asset management
- Secure web server
- Application services
- SNAP
- Grid infrastructure



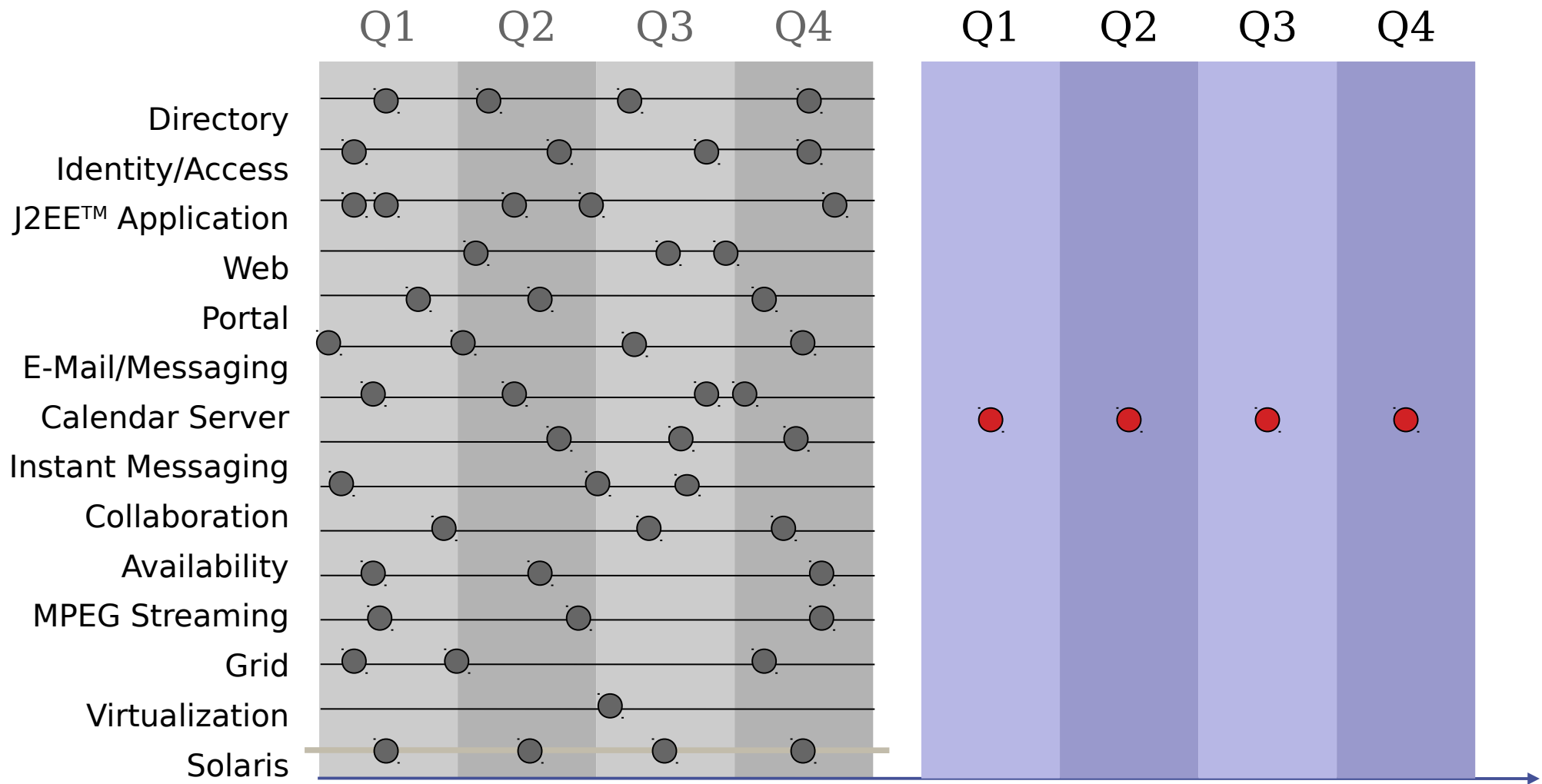
CUSTOMER READY SYSTEMS

- Easy implementation
- Reliable deployment
- Faster time to market
- Customized options and services

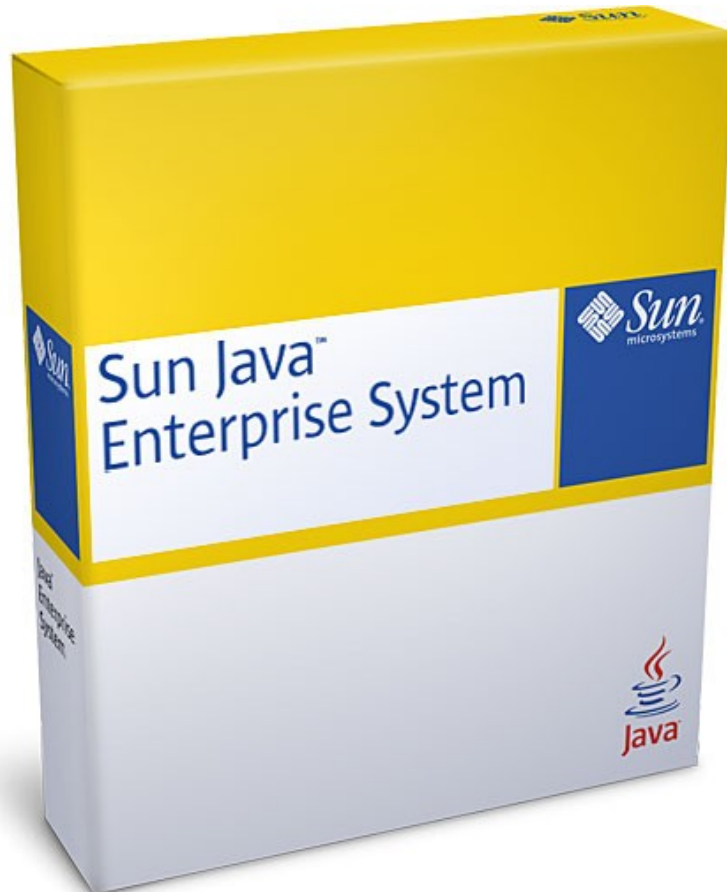
Systemsness and the “NC”



Java™ Enterprise System



Java™ Enterprise System



- ☒ Delivery
- ☒ Pricing
- ☒ Licensing

 **RTU**
RIGHT TO USE

\$95/Employee/Year - GSA

Staying Out of the

EPIDEMIC | Crippling Computer Viruses and Spam Attacks Threaten the Information Economy

BusinessWeek 9/8/03

The virus epidemics of the past summer should serve

The Ever-Growing Virus Crisis

BusinessWeek

August 26, 2003

About three weeks after corporate computers and networks were blitzed by the SoBig. Computer virus and the Internet Blaster worm and its variants, the threats have diminished and appears to be

VIRUSES | Blackouts could be just the beginning of our tech disasters

USA Today 27 August

Viruses and virus anti-malevolence raise the specter of the power grid, and the and corporate te

Microsoft worm patch may be flawed

CBS.MarketWatch.com

August 14, 2003

Computer variants, the or completed can do to ave

COST OF EACH SECURITY BREACH £77,000

IT departments struggling to keep up

By Andy McCue, 18/03/2002

Each security breach cost UK businesses an average of £77,000, according to a survey by consultants KPMG. The consultancy con executives at co

Attacks expected to get worse, could even bring Net to its knees

USA Today, 8/26/03

from the blaster worm w e-mail worm is

fear even worse

Hackers cost firms billions of dollars

By John Geraldts in Silicon Valley, 10/02/2001

st European businesses €4.3bn in according to recent research. nesses worldwide found that lapses

Heart of Darkness, on a Desktop

New York Times

9/3/03

There appears to be little that Internet users can do to avoid attacks from a different type of worm or from the widely anticipated next version of the SoBig virus, experts say. The current SoBig.F version is due to expire September 10th, and

Two-Pronged Security Strategy

Offensive

Java Enterprise System

- Multifactor Authentication
- Role Based Access Control
- Provisioning
- Federated ID Management
- Secure Dynamic SSL VPN

Solaris Operating System

Solaris 9™ and 10™

- Role Based Access Control (RBAC)
- Strong Security at Install
- Solaris Cryptographic Framework
- IPSec/IKE Kerberos

Trusted Solaris™

- Security Labels for Mandatory Access Control



Defensive

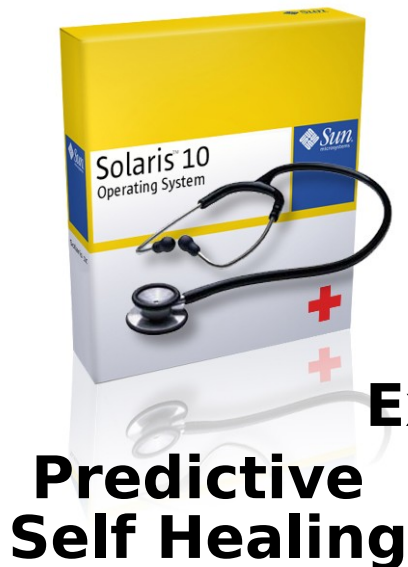
Java Enterprise System

- Audit Trails
- Java™ Sandboxes
- Role Based Access Control

Solaris Operating System

- Audit Trails
- N1 Grid Containers
- Process Rights Management
- Stateful Packet Filtering
- Patch Management

Solaris 10



**Predictive
Self Healing**

Reduced System
Downtime

Automatic Service
Restart



**Extreme System
Performance**

Fast TCP/IP Stack



**N1 Grid
Containers**

Software
Partitioning



**Advanced
Tracing**

Live Monitoring
of Production
Systems



**Trusted
Solaris**

Military-
Grade
Security

Sun Power Unit

- End-to-end IT services delivery
- Centrally managed
- Runs on local stateless clients
- Voice communications
- Dynamic portal service delivery



Server Systems: You Could Save \$9 Million



2 way x86
servers with 3.2 Ghz
Xeon Processors



2 way x86
servers with 3.2 Ghz
Xeon Processors



2 way x86
servers with 3.2 Ghz
Xeon Processors

Software:
WebSphere, Lotus, Tivoli

Software: Windows 2003,
Exchange Server,
SharePoint Portal

Software:
Java Enterprise System

IBM sServer 345

Poweredge 2650

Sun Fire V65X

Total cost over three years, 300 Employee company systems scaled for 500K users

\$10,727,18

VS.

\$9,403,401

VS.

\$1,354,369

Java Enterprise System: \$100 per employee, unlimited servers, CPUs, and U



ACCELERATE NETWORK SERVICE
DEPLOYMENT





Java vs. .Net

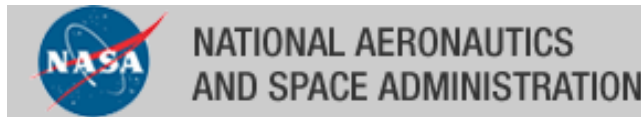
- **1.75 B Java devices worldwide**
- **300 Java handset models available from 32 manufacturers**
- **93 carrier deployments**
- **350 M Java handset install base as of June 30, 2004 (Ovum)**
- **600 M Java Cards deployed**



UNLEASH MOBILITY WITH
SECURITY



Java Card Momentum



US Department
of the Interior



Oman

Macau



Belgium
E-Citizen
Card



US Department of
Homeland Security

Taiwan Health Care
Card

United
Arab
Emirates



600M+ Java Cards Deployed Worldwide



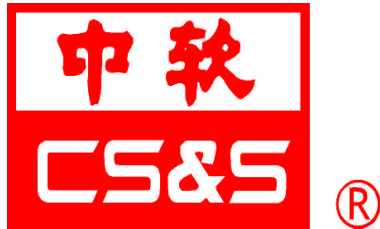
US Department of Defense

JICPAC: Joint Intelligence Center Pacific

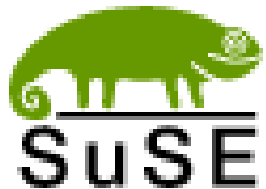
Results

- \$100M: 5-year Savings
- Average of 5 PCs Per User to a Single Sun Ray Client
- Meets Trusted Computing Deployment Criteria





JAVA DESKTOP SYSTEM



Mobility with Security Today

Sun Ray Savings

- 30,000+ deployed at Sun
- \$71 M in real estate avoidance in 2004
- Client savings: \$1,970 per client
- \$2.8 M per year on power per 25,000 Sun Rays
- 1 System Admin per 2,000 - 4,000 users
- Sun Ray consumes less power than a light bulb



Reducing Cost and Complexity

Sun's W1100z and
W2100z
Workstations



Runs Solaris,
Linux, and
Windows

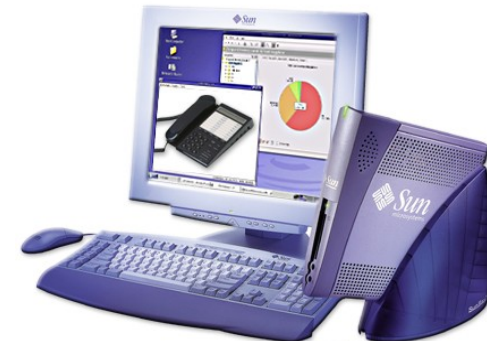
Shipping today



Hardware & Support: You Could Save \$87 Million




Dimension 8300





Sun Ray Client

Total cost over three years, 20K Employee company desktop hardware and support

Hardware and Support:

Client CPU and server, administration labor, refresh and life cycle, security and OS management, power consumption

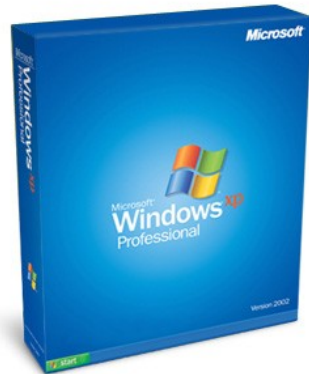
\$110,979,000

vs.

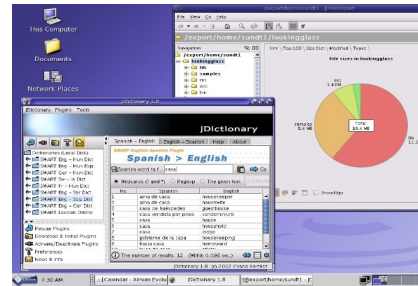
\$23,935,920

Sun Ray Thin Client: \$400 desktop, per year total support & hardware costs

Desktop Software: You Could Save \$48 Million



Microsoft®



Sun
microsystems

Java
Sun Microsystems

Windows XP Office and Partners

Java Desktop System

Total cost over three years, 20K Employee company desktop software

Software: Operating System, Office Productivity, Browser, Messaging / Calendar, Project Management, Business Diagramming, Drawing / Photo Editing, Personal Firewall, Virus Protection, Smart Card Security

\$51,958,000

VS.

\$3,000,000

Java Desktop System: \$50 per employee, up to 5 copies per employee

What You Need You to Do

- **Upgrade to Trusted Solaris and Solaris 10**
- **Write to Java Web Services, Not .Net**
- **Go open, not proprietary**
- **Move the dial to Sun Power Units**
- **Try Opteron systems running on Solaris**
- **Use modern clients, not PCs - JDS**
- **Join Executive Boardroom (Government)**
- **Visit Sun's Executive Briefing Center in California**

Give Me Feedback

Scott McNealy
ceo@sun.com

